

ABSTRACT OF THE DISCLOSURE

The present invention involves methods and apparatus for permanent downhole deployment of optical sensors. Specifically, optical sensors may be permanently deployed within a wellbore using a casing string. In one aspect, one or more optical sensors are disposed on, in, or within the casing string. The optical sensors may be attached to an outer surface of the casing string or to an inner surface of the casing string, as well as embedded within a wall of the casing string. The optical sensors are capable of measuring wellbore parameters during wellbore operations, including completion, production, and intervention operations.